03050201-030

(Cooper River/West Branch Cooper River)

General Description

Watershed 03050201-030 is located in Berkeley County and consists primarily of the *Cooper River and the West Branch Cooper River* and their tributaries. The watershed occupies 36,153 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Bladen-Bohicket-Wahee-Chipley series. The erodibility of the soil (K) averages 0.14; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 57.0% forested land, 12.7% forested wetland, 12.4% water, 7.3% urban land, 7.1% agricultural land, 2.9% scrub/shrub land, and 0.6% barren land.

The Cooper River is formed by the confluence of Lake Moultrie (Tail Race Canal) and Wadboo Creek. The West Branch Cooper River is formed from the confluence of the Cooper River and Mepkin Creek. The West Branch Cooper River accepts drainage from Molly Branch (Stony Branch, Wappoola Swamp) and Durham Creek (Durham Canal). The West Branch Cooper River drains into the Back River watershed (03050201-060) via Durham Creek and the Cooper River. There are a few recreational ponds (10-60 acres) and a total of 166.6 stream miles in this watershed, all classified FW. There also are numerous historic structures in the watershed.

Water Quality

Station #	Type Class	<u>Description</u>
CSTL-085	S FW	PIER IN W. BR. COOPER R. AT END OF RICE MILL RD IN PIMLICO

West Branch Cooper River (CSTL-085) - Aquatic life uses are fully supported. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. P,P'DDE (a metabolite of DDT) was detected in the 1997 sediment sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are partially supported due to fecal coliform bacteria excursions.

A fish consumption advisory has been issued by the Department for mercury and includes the West Branch Cooper River within this watershed (see advisory p.62).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT

WEST BRANCH COOPER RIVER

NPDES# TYPE LIMITATION

SC0021598

TOWN OF MONCKS CORNER WWTP MAJOR DOMESTIC PIPE #: 001 FLOW: 2.4 WQL FOR NH3-N

WEST BRANCH COOPER RIVER SC0039764

BCW&SA/CENTRAL BERKELEY WWTP MINOR DOMESTIC

PIPE #: 001 FLOW: 1.0 EFFLUENT

WAPPOOLA SWAMP SC0046175

SCE&G/WILLIAMS ASH PILE MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R EFFLUENT

UNCONSTRUCTED

MOLLY BRANCH SC0039535

SCE&G/WILLIAMS LANDFILL MINOR INDUSTRIAL

PIPE #: 001 FLOW: 0.033 EFFLUENT

MOLLY BRANCH TRIBUTARY SC0026867

OAKLEY VOCATIONAL CENTER MINOR DOMESTIC PIPE #: 001 FLOW: 0.0075 WATER QUALITY

WQL FOR BOD₅, NH3-N, TRC, DO

MOLLY BRANCH SCG730125

D&A PARTNERSHIP/DANGERFIELD MINE MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R EFFLUENT

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

SOLID WASTE LANDFILL NAME PERMIT #
FACILITY TYPE STATUS

SCE&G/WILLIAMS STATION 083320-1601 (IWP-191)

INDUSTRIAL ACTIVE

SCE&G/GENCO/WILLIAMS STATION 083309-1601 INDUSTRIAL ACTIVE

BERKELEY COUNTY LANDFILL 081001-1101 (DWP-105,

MUNICIPAL ACTIVE 081001-1102)

OLD BERKELEY COUNTY DWP-015

MUNICIPAL CLOSED

OLD BERKELEY COUNTY/NEIGHBORS SITE DWP-073
MUNICIPAL CLOSED

BERKELEY COUNTY C&D LANDFILL 081001-1201
CONSTRUCTION -------

BERKELEY COUNTY TIRE DISPOSAL 081001-5101

MUNICIPAL

Groundwater Contamination

The groundwater in the vicinity of the property owned by Dupont Standard Warehouse is contaminated by volatile organic compounds due to spills and leaks. The stream affected by the contamination is a tributary of Stony Branch. The facility is currently in the assessment phase and the Department is pursuing corrective action.

Growth Potential

Future growth is expected in several areas within the watershed, including the Town of Monks Corner, the Whitesville and Pimlico Communities, and the Berkeley Country Club area. The Town of Monks Corner and Berkeley County operate water and sewer systems in the area, which may allow scattered development.